



| | Time Local/ | Path Length | Path Width | Numb | oer of sons | Estin | nated nage | | June 1998 |
|---------------|----------------|----------------|---------------|--------|----------------|----------|---------------|--------------------|-----------|
| | LOCal/ | Lengin | width | FCIS | SOHS | Dai | nage | | |
| Location Date | Standard | (Miles) | (Yards) | Killed | Injured | Property | Crops | Character of Storm | |

MICHIGAN, East

MIZ047>049-053>055-060>063-068>069-075 Midland - Bay - Huron - Saginaw - Tuscola - Sanilac - Shiawassee - Genesee - Lapeer - St. Clair - Livingston - Oakland - Washtenaw

12 1300EST 0 0 High Wind (G35)

A cold front moved east across southeast Michigan early in the afternoon. West to northwest winds behind the cold front gusted as high as 40 mph. These winds, following so closely on the heels of the derecho of May 31st, caused some problems. Some tree limbs and power lines, undoubtedly weakened by the severe weather two days previous, came down. Detroit Edison estimated that 40,000 customers lost power, and Consumers Energy reported that the gusty winds put the restoration of electrical service from the May 31st storms behind schedule.

| Monroe County 2 N Ottawa Lake to Petersburg | 12 | 1630EST | 0 | 0 | | Hail (0.75) |
|---|----|--------------------|---|---|-----|-------------------------|
| Lenawee County Cambridge Jct | 12 | 1635EST | 0 | 0 | | Hail (0.75) |
| Monroe County Ida | 12 | 1640EST | 0 | 0 | 5K | Thunderstorm Wind (G52) |
| Washtenaw County 1 SE Saline to 3 NW Milan | 12 | 1700EST 1705EST | 0 | 0 | 40K | Thunderstorm Wind (G52) |
| Washtenaw County 3 N Ypsilanti to 5 S Ypsilanti | 12 | 1719EST 1725EST | 0 | 0 | 5K | Thunderstorm Wind (G52) |
| Wayne County Belleville | 12 | 1730EST | 0 | 0 | | Thunderstorm Wind (G52) |

A strong area of low pressure moved slowly east across the Upper Peninsula of Michigan during the day. The associated cold front crossed the Lower Peninsula during the late afternoon and evening hours. Severe thunderstorms developed in southern Michigan ahead of the cold front.

The cluster of storms that affected southeast Michigan had produced a tornado near Battle Creek earlier in the day. No tornadoes occurred in southeast Michigan; in fact, most of damage was only marginally severe. The exception to this was in the small community of Mooreville in southern Washtenaw County. Almost every residence in town suffered at least some tree damage, several cars were damaged, and the roof of a house was smashed.

Elsewhere, a couple of trees were downed just southeast of Saline, as well as south of Ypsilanti. A spotter north of Ypsilanti estimated 60 mph winds, as did the general public in Belleville. In Ida, a tree was downed, and several telephone poles were bent by thunderstorm winds. Dime sized hail was reported near Michigan Speedway and in western Monroe County.

| Livingston County 1.5 SSE Hartland | 14 A light | 1700EST tning strike damaged electri | | 0 Hartland T | 0 Γownshi | 10K p wastewater treatmen | Lightning nt plant. |
|---------------------------------------|----------------------|---|---|------------------------|---------------------|------------------------------|----------------------------|
| Wayne County Livonia | 16 | 1650EST | | 0 | 0 | 2K | Lightning |
| Wayne County Detroit | 16 M23O | 1800EST U | ; | 1 | 0 | | Lightning |
| Wayne County Taylor | 16 | 1830EST | | 0 | 2 | | Lightning |





| | | Time Local/ | Path Length | Path Width | Numb Pers | per of sons | Estimated Damage | June 1998 | |
|--|---|--|---|---|---|---|--|--|--|
| Location | Date | Standard | (Miles) | (Yards) | Killed | Injured | Property Crops | Character of Storm | |
| MICHIGAN, East | | | | | | | | | |
| Washtenaw County 3 W Hudson Mills | 16 | 1852EST | | | 0 | 0 | 100K | Lightning | |
| Oakland County Oxford | 16 | 2030EST | | | 0 | 0 | 5K | mi 1 4 W/ 1/052) | |
| Oxidiu | A bro Michi thunde | ad but weak area gan during the la | ate afternoon | hours. Inte | ated over the | e Great L tween this | akes. A trough d | Thunderstorm Wind (G52) ropped slowly southeast across southeast mber of lake breeze boundaries ignited l. However, the storms were prodigious | |
| | contril and w and a WUO | buted to the strike as taken to the ho trip to the hospi | Two were in spital, which ital was not rock by lightning. | njured when she was release equired. On ag. Both the | lightning strased from land Peach Modern transmission | ruck at a Later that nipountain in on line to | ittle League game i ght. A boy was kn northern Washten the antenna, and t | was carrying a tire iron, which may have n Taylor. A woman suffered convulsions ocked down, but was treated at the scene, aw County, the transmitting antenna for he antenna itself, had to be replaced. A | |
| Monroe County | 4.0 | | | | | | | | |
| Lambertville | 19 | 0230EST | | | 0 | 0 | 15K | Thunderstorm Wind (G52) | |
| Monroe County 1 N North Shrs | 19 0300EST 0 0 1K Thunderstorm Wind (G52) A warm front slowly moved north into southern Michigan in the early morning hours. Thunderstorms developed along this front and two of them became marginally severe. Trees were downed in Lambertville; one did substantial damage when it fell on a home Numerous limbs were downed on the Lake Erie shoreline in LaSalle Township; one home had a window broken by a falling limb. A plastic lawn chair was also smashed. | | | | | | | | |
| Tuscola County Fairgrove | 21 | 1430EST | | | 0 | 0 | 3K | Thunderstorm Wind (G52) | |
| Shiawassee County 1 S Owosso | 21 | 1615EST | | | 0 | 0 | 2K | Thunderstorm Wind (G52) | |
| Saginaw County Bridgeport | ahead were o | of the trough. Th | nese were typi er lines in Fai | cal 'pulse' ty rgrove, and | pe storms, w | vith a few | of them becoming | Thunderstorm Wind (G52) understorms developed in the unstable air marginally severe. Some large tree limbs f Owosso. Several trees and many limbs | |
| Midland County Edenville to Sanford | 24 | 1610EST 1615EST | | | 0 | 0 | | Hail (1.75) | |
| Bay County 3 NW Pinconning | 24 | 1630EST | | | 0 | 0 | | Hail (1.75) | |
| Washtenaw County Chelsea to 5 NW Chelsea | 24 | 1722EST 1727EST | | | 0 | 0 | | Hail (1.75) | |
| Washtenaw County 4.5 N Chelsea | 24 | 1725EST | | | 0 | 0 | 20K | Lightning | |
| Washtenaw County Chelsea | 24 | 1740EST | | | 0 | 0 | | Hail (1.00) | |





| Location | Date | Time Local/ Standard | Path Length (Miles) | Path Width (Yards) | | ber of sons Injured | Estin Da: Property | nated mage Crops | June 1998 Character of Storm |
|---------------------------------|-------|----------------------------|---------------------------|--------------------------|-------------|---------------------------|--------------------------|------------------------|--|
| MICHIGAN, East | | | | | | | | | |
| Washtenaw County | | | | | | | | | |
| Sylvan to Lima | 24 | 1740EST 1754EST | | | 0 | 0 | 40K | | Thunderstorm Wind (G65) |
| Midland County | | | | | | | | | |
| Coleman | 24 | 1743EST | | | 0 | 0 | | | Hail (1.00) |
| Midland County | | | | | | | | | |
| Edenville | 24 | 1750EST | | | 0 | 0 | | | Hail (0.75) |
| Washtenaw County | | | | | | | | | |
| Ann Arbor to Ypsilanti | 24 | 1810EST 1815EST | | | 0 | 0 | | | Thunderstorm Wind (G65) |
| Washtenaw County | | | | | | | | | |
| Whittaker to Milan | 24 | 1815EST 1820EST | | | 0 | 0 | | | Hail (1.75) |
| Washtenaw County | | | | | | | | | |
| Ypsilanti to Pittsfield | 24 | 1815EST 1819EST | | | 0 | 0 | | | Hail (1.75) |
| Washtenaw County | | | | | | | | | |
| Whittaker to 1.5 W Whittaker | 24 | 1820EST 1835EST | | | 0 | 0 | | | Thunderstorm Wind (G61) |
| Lenawee County | | | | | | | | | |
| Macon | 24 | 1825EST | | | 0 | 0 | 2K | | Thunderstorm Wind (G52) |
| Monroe County | | | | | | | | | |
| 2 N Maybee to 2 S Carleton | 24 | 1828EST 1843EST | | | 0 | 1 | 15K | | Thunderstorm Wind (G52) |
| Washtenaw County | | | | | | | | | |
| Milan | 24 | 1835EST | | | 0 | 0 | | | Hail (1.75) |
| Monroe County | | | | | | | | | |
| Dundee | 24 | 1840EST | | | 0 | 0 | 5K | | Thunderstorm Wind (G52) |
| Monroe County Stony Pt | 24 | 1859EST | | | 0 | 0 | | | Hail (0.75) |
| Monroe County | | | | | | | | | |
| 1 E Temperance | 24 | 1904EST | | | 0 | 0 | | | Thunderstorm Wind (G52) |
| | Thund | derstorms develor | ned in a warm | and humid | airmass dui | ring the aft | ternoon T | he storms | focused on a pair of east-west oriente |

Thunderstorms developed in a warm and humid airmass during the afternoon. The storms focused on a pair of east-west oriented boundaries: one stretched across central lower Michigan, while the second was a weak warm front moving north into the southern portion of the state. Thunderstorms near both boundaries became severe.

Storms near the northern boundary were hail producers. Golfball sized hail was reported by a spotter in Sanford, and also by the Michigan State Police northwest of Pinconning. Dime to quarter sized hail was reported at a number of other locations in Midland and Bay Counties.

Along the warm front, a large supercell developed in south-central Michigan. It moved east and then turned southeast across southeast Michigan. Hardest hit was Washtenaw County, most notably around Chelsea, and from Milan to Whittaker. These locations were affected by parts of the supercell for an extended period of time. Severe weather started in the area around and north of Chelsea, where golfball sized hail fell. A lightning strike started a house fire north of Chelsea. Quarter sized hail fell in Chelsea about 20 minutes later, but this part of the storm was more noted for the wind damage it caused. Trees were downed in Sylvan, Chelsea, and Lima. A truck was destroyed by a fallen tree in Sylvan, and a few homes in Chelsea were damaged in a similar manner. Wind gusts also destroyed in barn in Lima. The wind was estimated at 75 mph in Chelsea.

The supercell covered the Milan-Whittaker area with golfball sized hail. A spotter in Whittaker estimated 70 mph winds. Again, a second component of the large supercell caused severe weather 15 to 20 minutes later. This one also produced golfball sized hail in Milan, and emergency management officials estimated 70 mph winds just west of Whittaker.

Although not hit as hard, the Ann Arbor-Ypsilanti area also saw severe weather. A spotter in Ann Arbor estimated 60 mph winds on the fringe of the supercell, while a spotter in Ypsilanti saw golfball sized hail and 75 mph winds. Another spotter in Pittsfield saw dime sized hail.





Time Local/ Length Width Persons Damage
Location Date Standard (Miles) (Yards) Killed Injured Property Crops Character of Storm

MICHIGAN, East

The supercell continued southeast into Lenawee and Monroe Counties. Only the northeast corner of Lenawee County was grazed, as trees were downed near Macon. Monroe County took a more substantial hit. A golfer at Thorn Hills Golf Club, northeast of Maybee, was hurt when a large tree limb fell on him. Trees were also downed in Dundee and Raisinville Township. A spotter estimated 60 mph winds in Maybee, as did emergency management officials just south of Carleton. Dime sized hail fell at the Fermi II Nuclear Power Plant. Finally, a sheriff just east of Temperance estimated a gust of 60 mph.

This supercell would go on to cause substantial damage in northern Ohio

| Tuscola County Mayville | 25 | 2015EST | 0 | 0 | 2K | Thunderstorm Wind (G52) |
|-------------------------------|----|--------------------|---|---|-----|-------------------------|
| Tuscola County Vassar | 25 | 2015EST | 0 | 0 | 2K | Thunderstorm Wind (G52) |
| Shiawassee County | | | | | | |
| Owosso | 25 | 2115EST | 0 | 0 | | Thunderstorm Wind (G52) |
| Genesee County Clio | 25 | 2142EST 2157EST | 0 | 0 | | Hail (1.75) |
| Tuscola County | | | | | | |
| Millington | 25 | 2208EST 2212EST | 0 | 0 | | Hail (1.75) |
| Shiawassee County | | | | | | |
| Byron | 25 | 2210EST | 0 | 0 | | Thunderstorm Wind (G52) |
| Genesee County | | | | | | |
| Fenton | 25 | 2233EST | 0 | 0 | | Hail (0.75) |
| Genesee County Grand Blanc | 25 | 2257EST | 0 | 0 | | Hail (0.75) |
| Lenawee County | | | | | | |
| Addison | 26 | 0119EST | 0 | 0 | 5K | Thunderstorm Wind (G52) |
| Washtenaw County 4 N Chelsea | 26 | 0125EST | 0 | 0 | 2K | Thunderstorm Wind (G52) |
| Washtenaw County | | | | | | |
| Dexter to 2 W Ann Arbor | 26 | 0137EST 0152EST | 0 | 0 | 10K | Thunderstorm Wind (G52) |
| Washtenaw County | | | | | | |
| 3 N Manchester | 26 | 0139EST | 0 | 0 | | Thunderstorm Wind (G52) |

A hot and humid airmass had settled over Michigan. Afternoon temperatures rose into the 90s, with dew points in the 70s. This produced an unstable air mass, and scattered thunderstorms developed in the evening hours. The approach of an upper level jet allowed some thunderstorms to persist well past midnight.

During the evening, severe thunderstorms sporadically produced large hail and damaging winds. Power lines were downed by winds in Mayville, and a large tree was felled in Vassar. Gusts of 60 mph were estimated in both Owosso and Byron. In Clio, the problem was hail; dime sized or larger hail fell for fifteen minutes. Golfball sized hail fell on two occasions during that time period. Large hail was also reported in parts of Tuscola County, and in southern Genesee County.

A weakening area of thunderstorms moved southeast into Washtenaw and Lenawee Counties after midnight. These storms were still potent enough to generate severe wind gusts in the western parts of these counties. Trees were downed in Dexter, Addison, north of Chelsea, and just west of Ann Arbor. Law enforcement estimated a 60 mph gust near Manchester. These storms weakened below severe limits as they continued east.





June 1998 Time Local/ Path Length Path Number of Estimated Width Persons Damage MICHIGAN, East Lenawee County 0545EST 0 0 6K 3 S Rome Center 26 Lightning Lightning struck a home on Plank Road, causing significant electrical damage. Lenawee County Medina 1455EST Hail (0.88) A warm front lay across the southern border of Michigan. A number of severe thunderstorms developed south of the front in Indiana and Ohio, but only one severe cell developed in southeast Michigan. A citizen reported nickel sized hail with this thunderstorm in southwest Lenawee County. St. Clair County **Port Huron** 30 0200EST 5K Lightning **Oakland County** Oxford 30 0230EST 0 Hail (0.75) **Oakland County** Oxford 30 0230EST 10K Thunderstorm Wind (G52) **Lapeer County** 30 0 Lapeer Hail (0.75) 0235EST The atmosphere over southeast Michigan was warm, humid, and unstable. Scattered thunderstorms developed in the early morning hours, just ahead of a strong upper level disturbance. A couple of these storms became marginally severe. Five trees and some power lines were downed in Oxford. Dime sized hail fell in Oxford and in Lapeer. In Port Huron, a lightning strike felled a tree onto an automobile. **Huron County** 5 NW Sebewaing 0930EST 30 Waterspout **Tuscola County** 4 SW Cass City 30 0945EST 0.1 10 5K Tornado (F0) A cold front passed through southeast Michigan around daybreak. Unseasonably cool air was ushered in aloft, maintaining some instability. A few showers developed in the Saginaw Bay area during the morning hours. Low level convergence along a lake breeze front provided additional support for precipitation. A number of funnel clouds were reported with these showers in Tuscola and Huron Counties. A brief touchdown was observed by a law enforcement official southwest of Cass City, where a residence suffered minor damage. Earlier, a waterspout had been observed from Sebewaing over Saginaw Bay. Washtenaw County 1 NE Milan to 3 N Whittaker 30 1145EST 0 Hail (0.75) 1148EST **Washtenaw County** Pittsfield 30 1145EST 40K Lightning **Washtenaw County** 3 N Whittaker 30 1148EST Thunderstorm Wind (G52) **Monroe County** 3 S Maybee 30 1225EST 5K Thunderstorm Wind (G52) A few thunderstorms developed behind a cold front and ahead of a surface trough at around midday. One thunderstorm became marginally severe in far southeast Michigan. This storm caused dime sized hail in southeast Washtenaw County, and a spotter north

this storm uprooted a tree and downed power lines.

of Whittaker estimated 60 mph winds. Lightning started a house fire in Pittsfield Township. South of Maybee in Monroe County,